

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group III in the reply filed on 07/17/2009 is acknowledged. The traversal is on the ground(s) that there is not a serious burden on the examiner to search all the claimed subject matter. This is not found persuasive because there is no requirement for search burden in 371 application. Lack of unity has been established in the previous office action and therefore restriction is proper.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Allen (US 5,725,906).

3. Allen discloses polymer concrete compositions comprising a slurry of a solid aggregate composition and a liquid monomer mixture [abstract]. The solid aggregate component is first mixed with a liquid compound agent prior to mixing with the liquid monomer phase [column 14 lines 22-26]. The coupling agent includes methacryloxypropyl-trimethyloxysilane [column 13 lines 13-14] and henceforth the aggregates read on the component A of the claims with at least two alkoxysilane

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groups. Liquid monomer mixtures of the examples include trimethylolpropane trimethacrylate (TMP-TMA) and gamma-methacryloxypropyl-trimethyloxy-trimethyloxysilane with functionalities f of 2.77 (mixture C) and 2.87 (mixture I) [Table 3]. The concrete composition is cured (polymerized) at 93°C [column 7 lines 6-8]. The composition include benzoyl peroxide [Table 3] which has a $T_{1/2}$ (1h) of 91.7°C.

4. Claims 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Corley (US 5,137,990).
5. Corley discloses several examples, including examples 6, 9 and 10 [Table 1] that combine an epoxy resin B [column 8 lines 15-16] with trimethylolpropane trimethacrylate (TMPTMA) [column 8 lines 22-23] with an organic peroxide curing agent [column 7 lines 27-28]. The epoxy resin B has an epoxy equivalent weight of 190-210 and an average molecular weight of about 400 [column 7 lines 1-2] and henceforth an epoxide functionality of about 2. The peroxide used does not have a $T_{1/2}$ (1h) of between 100°C and 50°, but it may be replaced by benzoyl peroxide [column 5 lines 22-23] which has a $T_{1/2}$ (1h) of 91.7°C. The compositions are cured at 80°C [Table 1].

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MIKE DOLLINGER whose telephone number is (571)270-5464. The examiner can normally be reached on M-F 9-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/mmd/

/Randy Gulakowski/

Supervisory Patent Examiner, Art Unit 1796